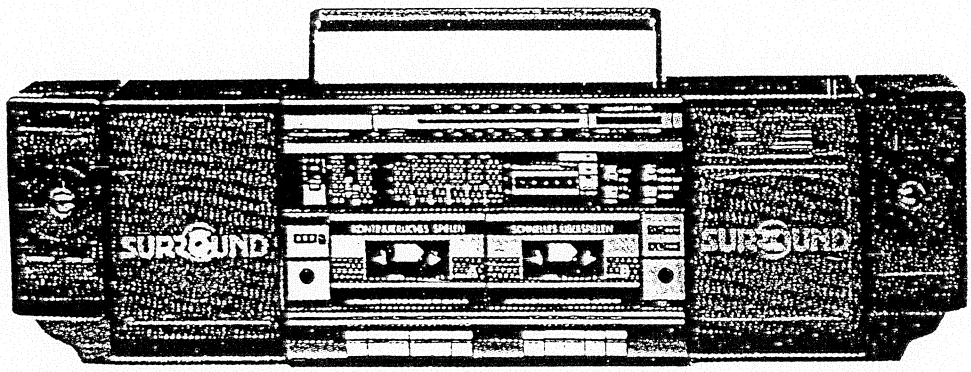
ANITECH®

Service Manual

STRR 5000



MODEL : 888 AM-FM-SW1-SW2
MN1801
20P
10K
180K
2K2
R118
8P4T
R179
C130
4.7UF
0.08880-02
30P
20P
10P
10P
20P
300P
47P
455K
SAT505
R142
C138
C120
C119
150
047

RADIO LW SECTION PERFORMANCE DATA DATE: 28th March., 1989

MFR: MODEL: MC88-X TYPE:

SUPPLY VOLTAGE :DC (12 V) AC (110 V & 220 V)50/60Hz MODULATION: 30% 1KHz

LOAD RESISTANCE: 4 Ohm STANDARD OUTPUT : 50 mW

MEASURING ITEMS	UNIT	NORMAL	RESULT MEASURMENT	LIMIT
Frequeney Range Low	KHz	150		±5
High	KHz	285		±5
Max. Sensitivity (170)KHz	uv/M	1400		2200
(200)KHz	uv/M	1400		2200
(265)KHz	uv/M	1400		2200
20dB Quieting Sensitivity (170)KHz	uv/M	2200		5000
(200)KHz	uv/M	2200		5000
(265)KHz	uv/M	2200		5000
Selectivity at 20dB S/N Inp. +/-10KHz	dB	15		20
-6dB Band Width at 20dB S/N Inp.	KHz	±5		±3
-6dB Audio Fidlity 1KHz=0dB	KHz	60Hz-3KHz		100Hz-2HK±
Image Rejection at 20dB S/N (265)KHz Point	dB	25		20
IF Rejection at 20dB S/N (170)KHz Point	dB	60		50
Intermediate Frequency 455 or 465KHz	KHz	455		±5
AGC DISTORTION (Mod. 30 % 1KHz 100uv Inp/)	%	1		2
Min. Vol. Noise & Hum	mV	2		3
Mod. Hum 5mv/M Inp.	dB	30		25
10 % Dis. Output Power (Mod. 80 %)	W	4		3.8
RF Over Load Dis. (Mod. % 5mv/M Inp.)	%			
Max. Output Power	W	5		4
OSC Drop Out at (170)KHz 5mv/M Inp. DC Supply	V	6		8
(220V) AC Supply	V	165		180
Dial Calibration 2mv/M Inp. ( )KHz	KHz			
( )KHz	KHz			
( )KHz	KHz			

(Normal)

RADIO SW SECTION PERFORMANCE DATA (3.2-12MHz) DATE: 28th March., 1989

MFR: MODEL: TW-888 / 889 TYPE:

SUPPLY VOLTAGE : DC (12 V) AC (110 V & 220 V) 50Hz MODULATION : 30 % 1KHz.

LOAD RESISTANCE : 4 Ohm STANDARD OUTPUT: 50 mW

NO	MEASURING ITEMS	UNIT	NORMAL	RESULAT MEASURMENT	LIMIT
1	Frequency Range Low	MHz	3.1		+0.1
	High	MHz	12.5		±0.2
2	Max. Sensitivty (3.2)MHz	uv/M	20		30
	(6)MHz	uv/M	20		30
	(12)MHz	uv/M	20		30
3	20dB Quieting Sensitivty (3.2)MHz	uv/M	28		35
	(6)MHz	uv/M	28		35
	(12)MHz	uv/M	28		35
4	Selectivity at 20dB S/N Inp. +/-10KHz	dB	18		15
5	-6dB Band Width at 20 dB S/N Inp.	KHz	5		3
6	-6dB Audio Fidelity 1KHz= 0dB	KHz	100Hz-3.5KHz		150Hz-
7	Image Rejection at 20dB S/N (6)MHz Point	dB	10		6
8	IF Rejection at 20dB S/N (3.2)MHz Point	dB	70		55
9	Intermediate Frequency 455 or 465 KHz	KHz	455		±5
10	Harmonic Distortion (Mod. 30 % 1mV Inp.)	%	1		3
11	Whistle Mod. 30 % 5mV/M Inp. 2 IF	%			
	3 IF	%			
2	Min. Vol. Noise & Hum	mV	1		3
13	Mod. Hum Mod. 30 % 1mV Inp. at (6) MHz	dB	40		30
14	10 % Distortion Output Power (Mod. 80%)	W	4		3.8
15	PMPO AC Supply Only Ext. SP. 3 Ohm per/Ch	W			
16	Max. Output Power	W	5		4
17	OSC Drop Out at (6)MHz 1mV/M Inp. DC Supply	V	6		8
	(220V) AC Supply	V	165		18
18	Dial Calibration 1mV/M Input ( )MHz	KHz			
	( )MHz	KHz			
	( )MHz	KHz			

FM RECEIVER SECTION PERFORMANCE DATA DATE: 28th March., 1989

MFR: MODEL: MC88F-X TYPE :

SUPPLY VOLTAGE: DC (12 V) AC (110 V & 220 V) 50Hz MODULATION : 30 % 1000 Hz

LOAD RESISTANCE : 4 Ohm STANDARD OUTPUT: 50 mW

NO	MEASURING ITEMS	UNIT	NORMAL	RESULT MEASUREMENT	LIMIT
10	Frequency Range	MHz	87.35 ±0.15		108.3 +0. -0.
1	Intermediate Frequency	MHz	10.7		±0.3
2	Maximun Sensitivty 90/98/106MHz	dB	15		20
3	30dB Quieting Sensitivty	dB	15		22
4	Image Rejection at 106MHz 30dB S/N	dB	35		28
5	IF Rejection at 98MHz 30dB S/N	dB	100		90
6	Selectivity +/-300KHz 30dB S/N	dB	45		35
7	Band Width -6dB at 98MHz 30dB S/N	KHz	±6		±3
8	-3dB Liniting 60dB Input at 98MHz	dB	25		30
9	AFC Hold-in 22.5KHz Dev. 60dB In. -3dB	KHz±	350		300
10	Stereo Sens. 40KHz Dev. per Channel	dB	20		30
11	Channel Crosstalk at 1KHz 60dB In.	dB	20		15
12	Audio Resp. -3dB Elect. 75Us Pre-emph	KHz	60Hz-12KHz		105Hz-10
13	Harmonic Distortion at 98MHz 60dB In.	%	1		3
14	S/N Ratio at 98MHz In. DC Supply 60dB I/N	dB	45		40
15	AC Supply. 60dB I/N	dB	40		35
16	Min. Volume Hum	mv	2		3
17	AM Suppression	dB	40		30
18	OSC Drop Out at 88MHz 60dB In. DC Supply	V	6		8
	at (220V) AC Supply	V	165		180
19	Output Level Difference Tape 1KHz 0dB	dB			
20	FM 40KHz Dev. 60dB In. 1KHz	dB	1		3
21	AM 80% Modulation 1KHz 60dB In. (MW/SW)	dB	1		3
22	Max. Output Power per Channel	W	5		4
23	10 % Distortion Output Power pwr Channel	W	4		3.8
24	Peak Music Power Output (PMPO) AC Supply				
	Ext. Speaker 3 Ohm per Channel	W			
25	Channel Output Difference at (W Output)	dB	1		3
26	S/Pilot Ratio 19KHz (Pilot Mod. 10 %)	dB	30		20

CASSETTE RECORDER SECTION PERFORMANCE DATA DATE: 28th March., 1989

MFR: MODEL: MC88F-X TYPE:

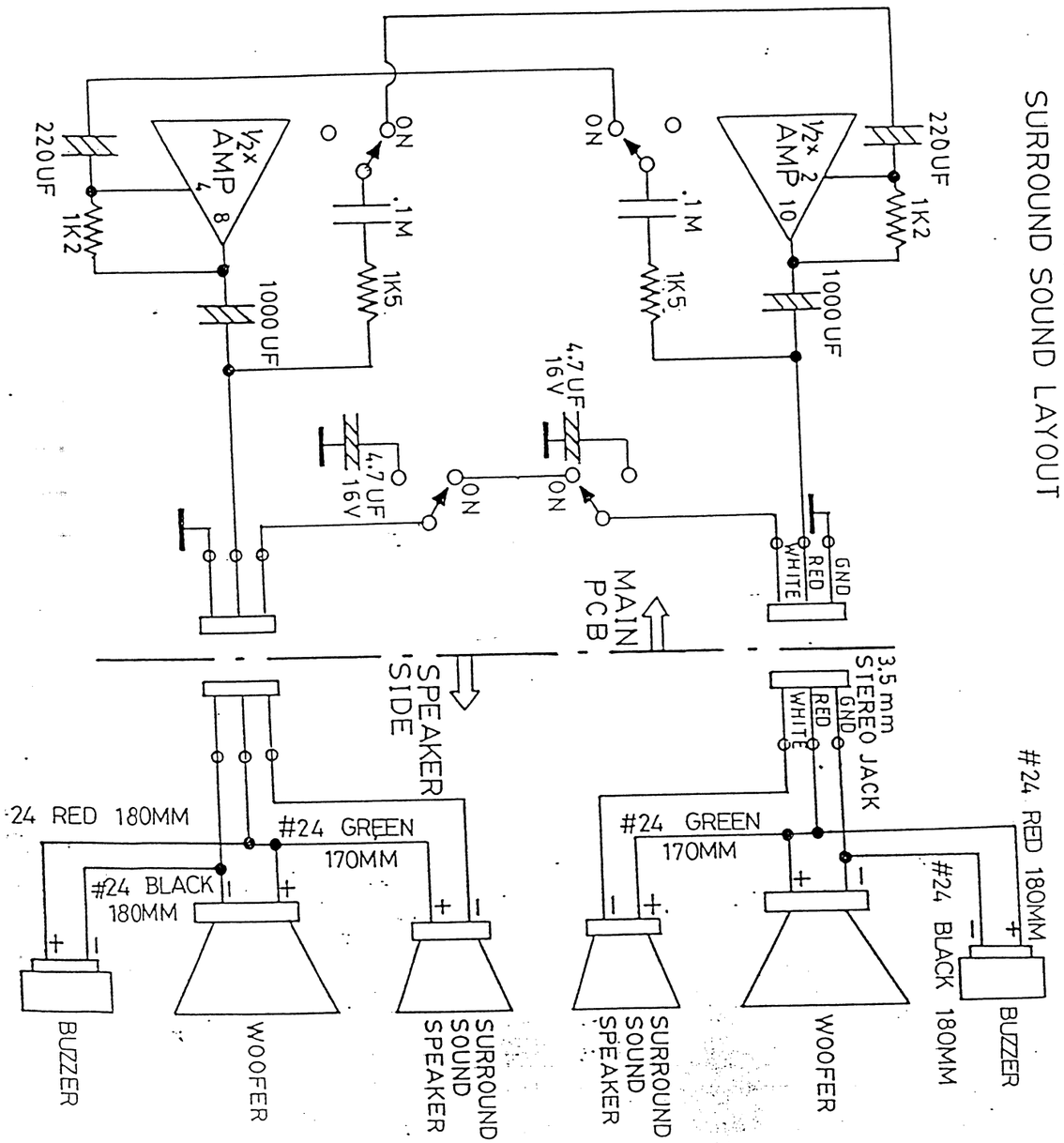
SUPPLY VOLTAGE : DC (12 V) AC (110 v & 220 V) 50Hz MODULATION

LOAD RESISTANCE: 4 Ohm STANDARD OUTPUT: 5 mW

NO	MEASURING ITEMS	UNIT	NORMAL	RESULT MEASUREMENT	LIMIT
29	R/P Frequ. Resp. CrO2 Tape (Nor Speed) -6dB	KHz			
30	R/P Frequ. Resp. Nor. Speed (high Speed) -8DB	KHz	100Hz-6.3KHz		150Hz-6.
31	R/P Frequ. Resp. Cro2 Tape (high Speed) -8dB	KHz			
32	R/P Channel Difference	dB	3		6
33	R/P Channel Crosstalk 1KHz 0dB Level	dB	30		20
34	Erase Ratio Nor. Tape (1KHz 0dB Level) DC	dB	35		25
35	Erase Ratio CrO2 Tape (1KHz 0dB Level)	dB			
36	Max. Vol. & Tone Output Noise	mV.	50		80
37	Max. Vol. (Tone in Flat) Output Noise	mV			
38	Min. Vol. Hum & Noise.	mV	1		3
39	Bass Control at Reference Output 100Hz	dB			
40	Treble Control at Referenee Output 10KHz	dB			
41	Loudness Control (Vol. in 105°) 125Hz	dB			
42	Phono Input Sens. 50K Ohm 1KHz (MM-Head)	mV			
43	Line Output 50K Ohm 1KHz	mV			
44	Line Input 50K Ohm 1KHz	mV			
45	AC Bias OSC Frequ. (in Center Position)	KHz	3		5
46	R/P Distortion With B-118 Tape Rate Nor.	%	4		8
47	R/P Dis. With B-118 Tape Rate High Speed	%	1		3

MC884-X

SURROUND SOUND LAYOUT



CASSETTE RECORDER SECTION PERFORMANCE DATA DATE: 28th March., 1989

MFR: MODEL : MC884-X TYPE:

SUPPLY VOLTAGE : DC (12 V) AC (110 V & 220 V) 50Hz MODULATION :

LOAD RESISTANCE : 4 Ohm STANDARD OUTPUT : 50 mW

NO	MEASURING ITEMS	UNIT	NORMAL	RESULT MEASUREMENT	LIMIT
	Torque Auto. Stop Sens.	Sec	0.5		1.5
	Operation Force Keys /PD	g-cm	1800		2300
	Torque Play Sony Pulling Meter CQ-403A	g-cm	60		300
	Torque F.F. Sony Torque Meter CQ-201A	g-cm	80		50
	Torque RWD Sony Torque Meter CQ-201A	g-cm	80		50
	Press. Pinch Roller	g-cm	400		300
	Standard Tape Speed 4.75cm/sec at 3KHz	%	±1.5		+3 -2.5
	Tape A & B Speed Difference	%			
	Tape A & B High Speed	Rate			
	F.F & RWD Time (C-60)	sec	150		180
	Wow and Flutter RMS (JIS) (B - 111)	%	2		4
	Stereo Crosstalk Check 1KHz (B - 141)	dB			
	Track Crosstalk Check 1KHz (B - 121)	dB			
	Distortion Check 1KHz-10dB (B - 118)	%	2		3
	Level Adj. Dis. Test 1KHz 0dB (B -112B)	%	2		3
	Play Frequ. Resp. (Nor. Speed) -6dB (Npr.)	KHz	60Hz-10KHz		100Hz-8KHz
	Play Frequ. Resp. CrO2 (Nor. Speed) -6dB	KHz			
	L/R Channel Level Difference 1KHz 0dB	dB	1.5		3
	10 % Dis. Output 1KHz 0dB (per Channel)	W	5		4.5
	Max. Output Power 1KHz 0dB (per Channel)	W	6.25		5
	DMO Power AC Supply Ext. Speaker 4 Ohm	W	50		45
	Drop Supply Operation (DC Supply) 4.75cm/sec	V	6		8
	Drop Sup. Oper. at 4.75cm/s. (AC 220V)	V	165		180
	Ext, Mic. Sens. 1KHz	mV			
	Built-in Mic Sens. 1KHz	mV			
	R/P Level Difference With 1KHz 0dB Rate	dB			
	R/P Level Diff. With 1KHz 0dB Rate CrO2	dB			
	R/P Frequ. Resp. Nor. Tape (nor Speed) -6dB	KHz	100Hz-8KHz		125Hz-6.3K

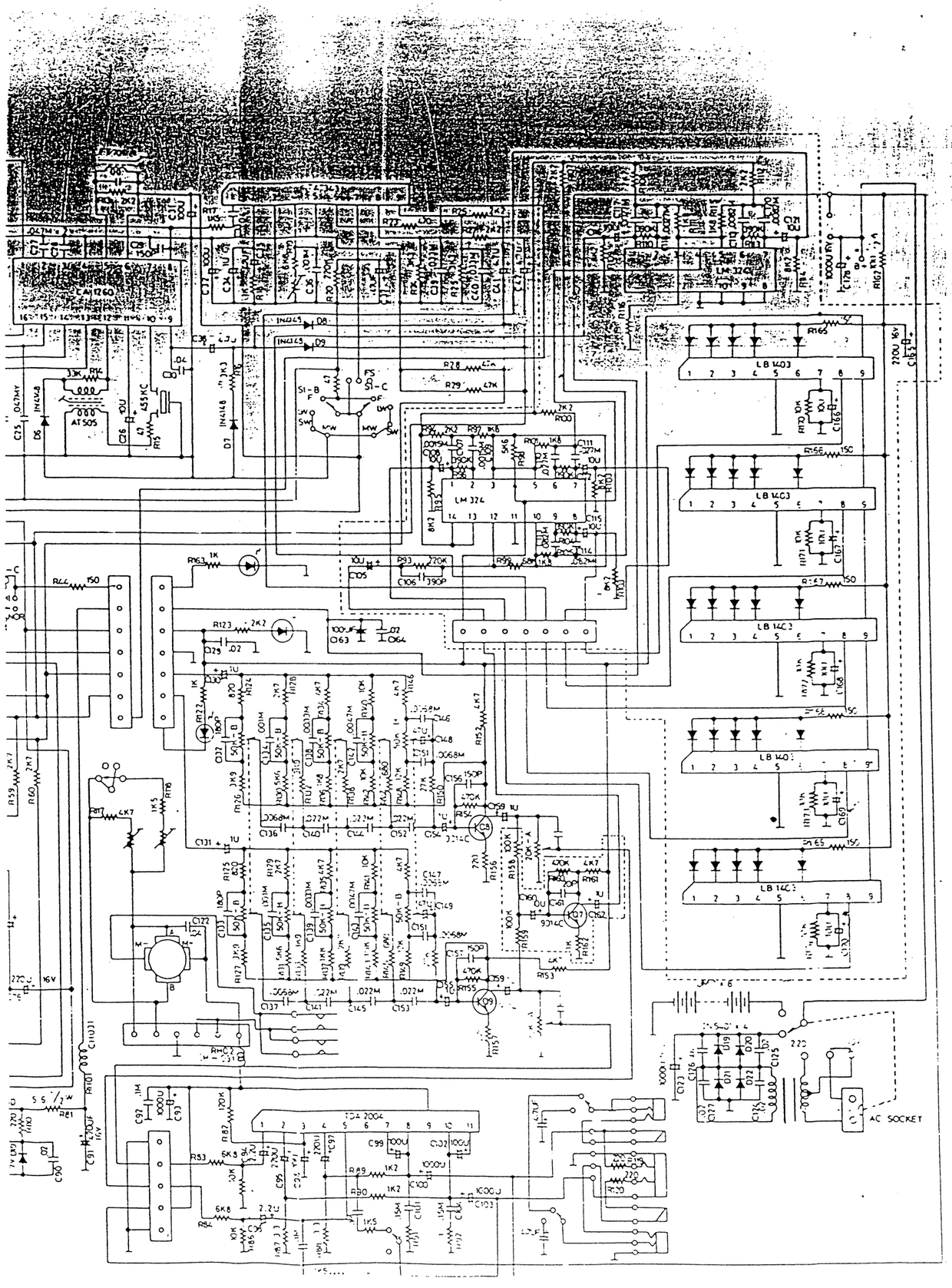
RADIO MW SECTION PERFORMANCE DATA DATE: 28th March., 1989

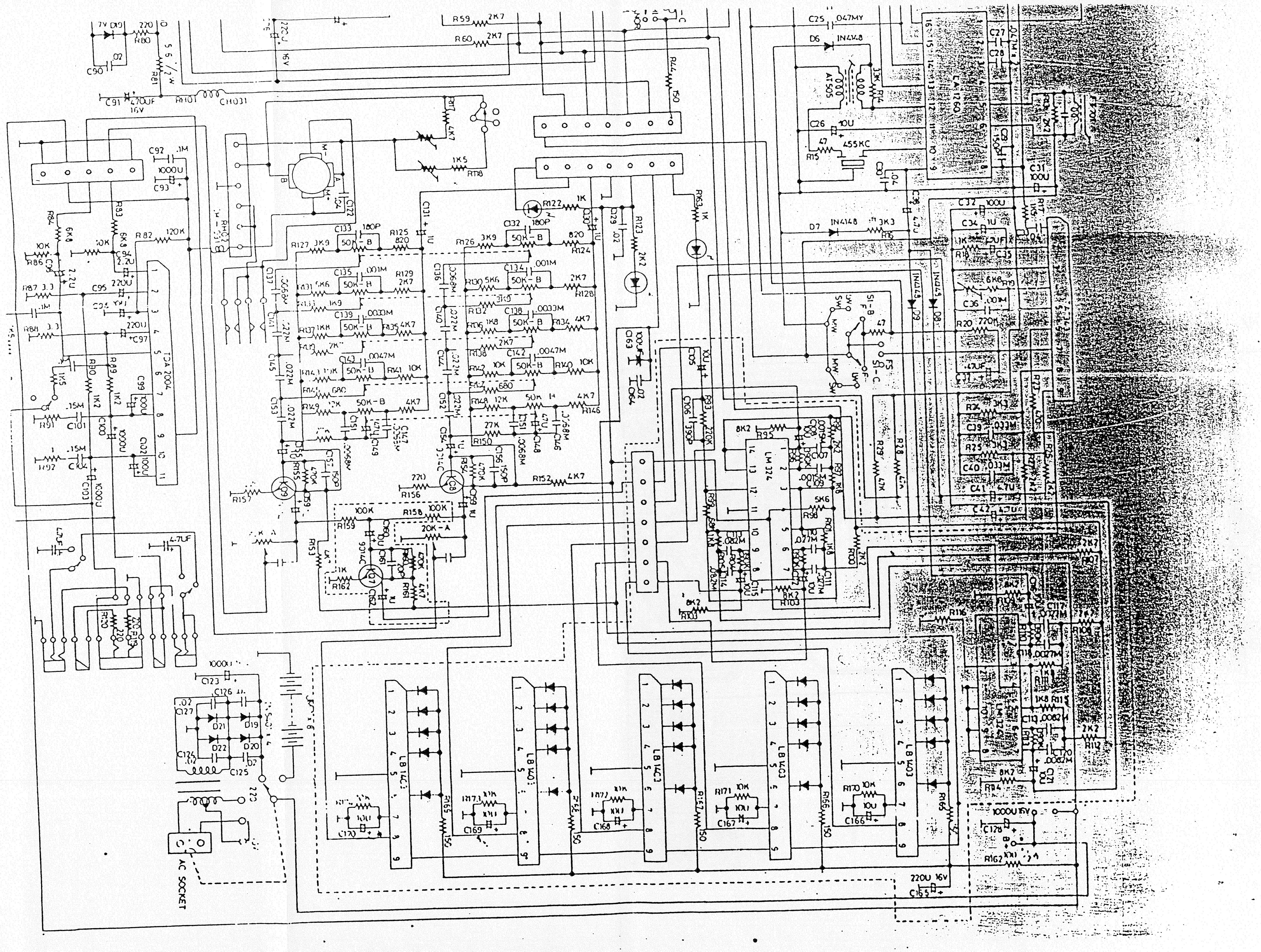
MFR: MODEL: MC881-X TYPE:

SUPPLY VOLTAGE: DC (12 V) AC (110 V & 220 V) 50Hz MODULATION: 30% 1KHz

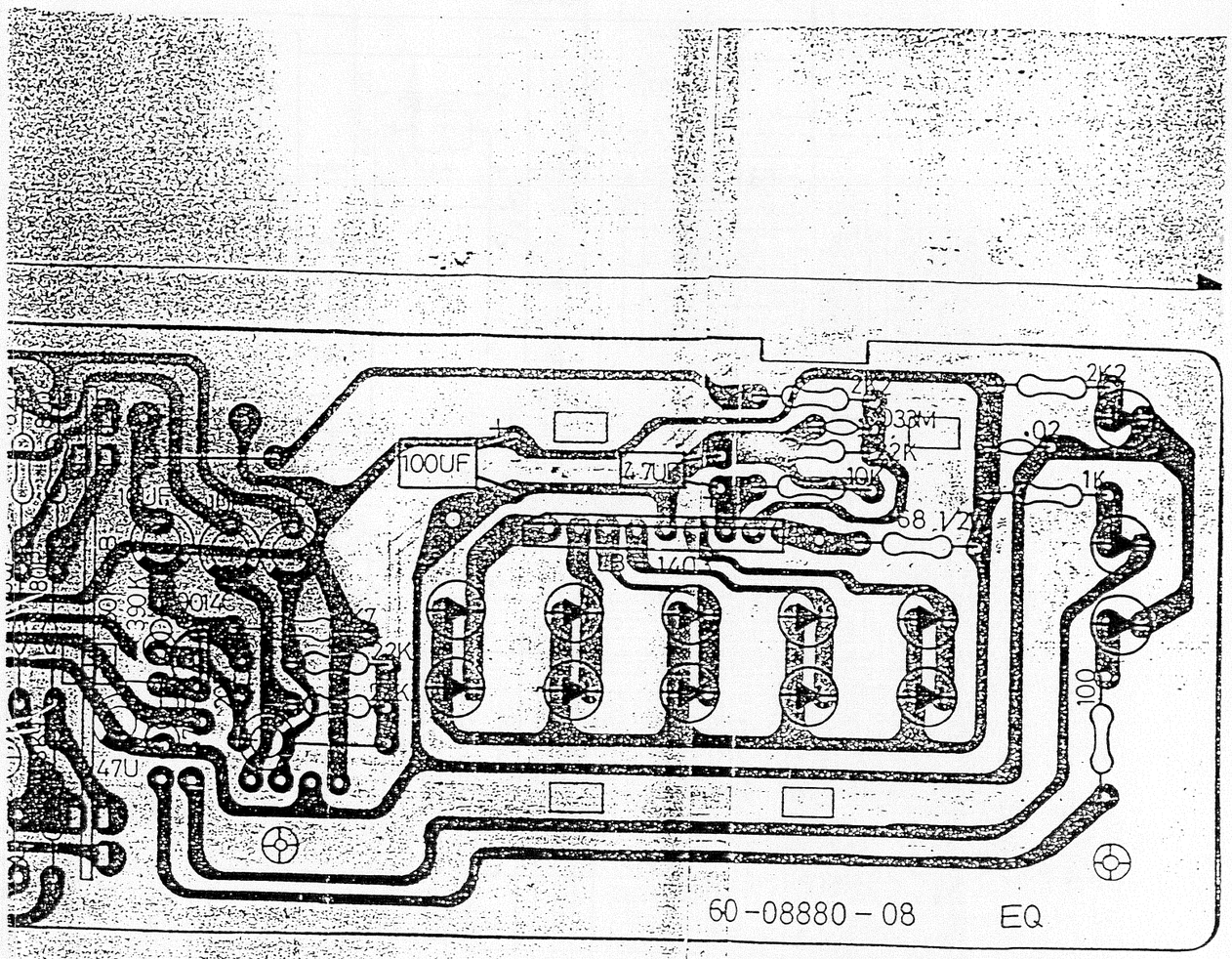
LOAD RESISTANCE 4 Ohm STANDARD OUTPUT 50 mW

MEASURING ITEMS	UNIT	NOTMAL	RESULT MEASUREMENT	LIMIT
Frequebcy Range	KHz	525 ±20		1650 ±3C
Intermediate Frequency 455 or 465 KHz	KHz	455		±5
Max. Sensitivity 600KHz	uv/M	310		700
1000KHz	uv/M	310		700
1400KHz	uv/M	310		700
20dB Quicting Sensitivity 600KHz	uv/M	310		1000
1000KHz	uv/M	310		1000
1400KHz	uv/M	310		1000
Selectivity at 20dB S/N Inp. +/-10KHz	dB	20		26
-6dB Band Width at 20dB S/N Inp.	KHz	5		3
-6dB Audio Fidelity 1KHz=0dB	KHz	60Hz - 3KHz		100Hz-2.
Image Rejection at 20dB S/N 1400KHz Point	dB	50		45
IF Rejection at 20dB S/N 600KHz Point	dB	60		50
AGC FOM Mod. 30 % 1KHz 100mV Inp.	dB	55		45
AGC Distortion Mod. 30% 1KHz 100mV Inp.	%	1		2
Whistle Mod. 30 % 5mV/M Inp. 2 IF	%	3		5
3 IF	%	3		5
Min. Vol. Noise & Hum	mV	2		3
Mod. Hum 5mV/M Inp.	dB	40		35
10 % Distortion Output Power (Mod. 80 %)	W	4		3.8
RF Over Load Dis. (Mod. 80 % 5mV/M Inp.)	%			
Max. Output Power	W	5		4.5
OSC Drop Out at 600KHz 5mV/M DC Supply (Inp.)	V	6		8
(220 V) AC Supply (Inp.)	V	165		180
Dial Calibration 1mV/M Input 600KHz	KHz			
1000KHz	KHz			
1400KHz	KHz			



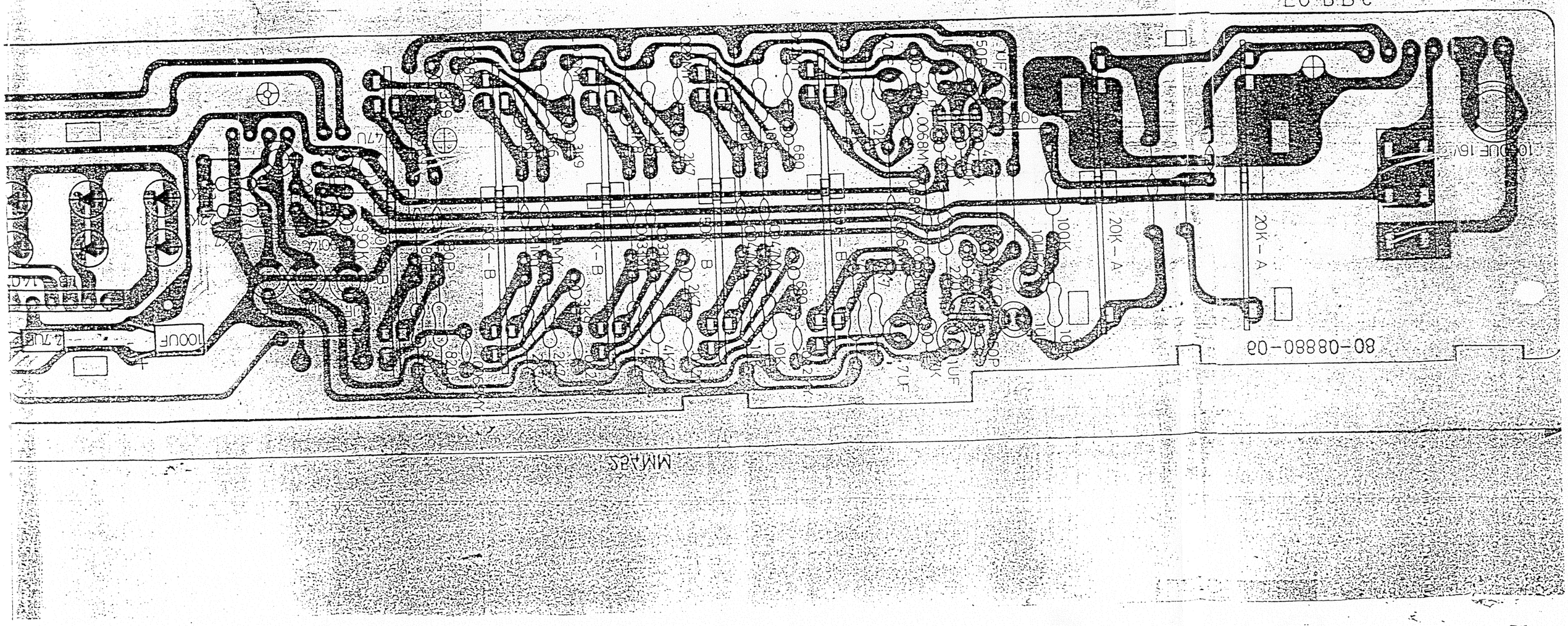


C90 .02
7V D19
220 R80
5.6 1/2W R81
C91 470UF 16V
R101 CH031
16V
R59 2K7
R60 2K7
R44 150
C25 .047MY
D6 1N4148
AT505
33K R14
C26 10U
47 R15 455KC
C30 .04
C27
C28
LA1260
C29 150P
C31 100U
C92 .1M
1000U
C93
R84 6K8
10K R86
R83 6K8
10K
R82 120K
C94 2.2U
2.2U
R87 3.3
C95 220U
.1M
220U
R88 3.3
C97
R90 1K2
R89 1K2
1K5
TDA 2004
C99 100U
.15M R91 C101
C100 1000U
C102 100U
R92 .15M
C103 1000U
M-
M+
B
A
C122 .04
R117 4K7
1K5 R118
C133 180P
50K-B
R125 820
C131 1U
R127 3K9
C132 180P
50K-B
R126 3K9
820 R124
R122 1K
C130 1U
C129 .02
R123 2K2
R163 1K
C137 .0068M
C135 .001M
50K-B
R129 2K7
R131 5K6
R133 1K9
C139 .0033M
50K-B
R137 1K8
R135 4K7
2K7
C141 .022M
C143 .0047M
50K-B
R143 10K
R141 10K
C145 .022M
R145 680
R149 12K
50K-B 4K7
C153 .022M
C151
C149 47U
C147 .0068M
C155 1U
R155 470K
C157 150P
Q9
R157
C59
C136 .0068M
C134 .001M
R130 5K6
50K-B
2K7 R128
R132 3K9
C138 .0033M
R136 1K8
50K-B
R134 4K7
C140 .022M
R138 2K7
C142 .0047M
R142 10K
50K-B
R140 10K
C144 .022M
680
R148 12K
50K-B
4K7 R146
C152 .022M
27K
C151
47U
C148
C146 .0068M
R150 .0068M
C154 1U
2SC
R154 470K
C156 150P
220 R156
C58
R152 4K7
C63 100UF
C64 .02
C105 10U
C106 390P
R93 220K
100K R159
R158 100K
20K-A
C160 10U
9014C
C161 20P
470K
1K R162
Q7
R161 4K7
C162 1U
R153 4K
4.7UF
4.7UF
R120
220
220 R119
1000U
C123
C126 .02
.02 C127
D21
D19
D22
D20
C124 .02
.02
C125
220
AC SOCKET
SW
MW
S1-B
F
47
MW
S1-C
F
D7 1N4148
R16 3K3
C38 4.7U
C32 100U
C34 1U
R17 1K5
.04
1K
4.7UF
R18
C35
1N4148
D9
1N4148
D8
6K8 R19
C36 .001M
R20 220K
.47UF
C37
R24 3K3
C39 .033M
R25 3K3
C40 .033M
C41 4.7U
C42 4.7U
R29 47K
R28 47K
8K2 R95
LM 324
C108 .0015M
C107
R97 1K8
C109 .0015M
5K6 R98
R99
C110 .027M
C111 .027M
R100 2K2
C115 10U
8K2 R103
8K2 R103
R107 2K7
R116
C117 .027M
R106 2K7
R110
C118 .0027M
1K8 R115
C119 .0082M
R112 2K2
C170 .0082M
C171 10U
8K2 R94
LB1403
R165 150
R173 10K
10U
C170
LB1403
R174 10K
10U
C169
150
LB1403
R172 10K
10U
C168
R167 150
LB1403
R171 10K
10U
C167
R166 150
LB1403
R170 10K
10U
C166
R165
1000U 16V
C178
R162 100
220U 16V
C165



COMMON PART FOR ALL BA

MC 88-X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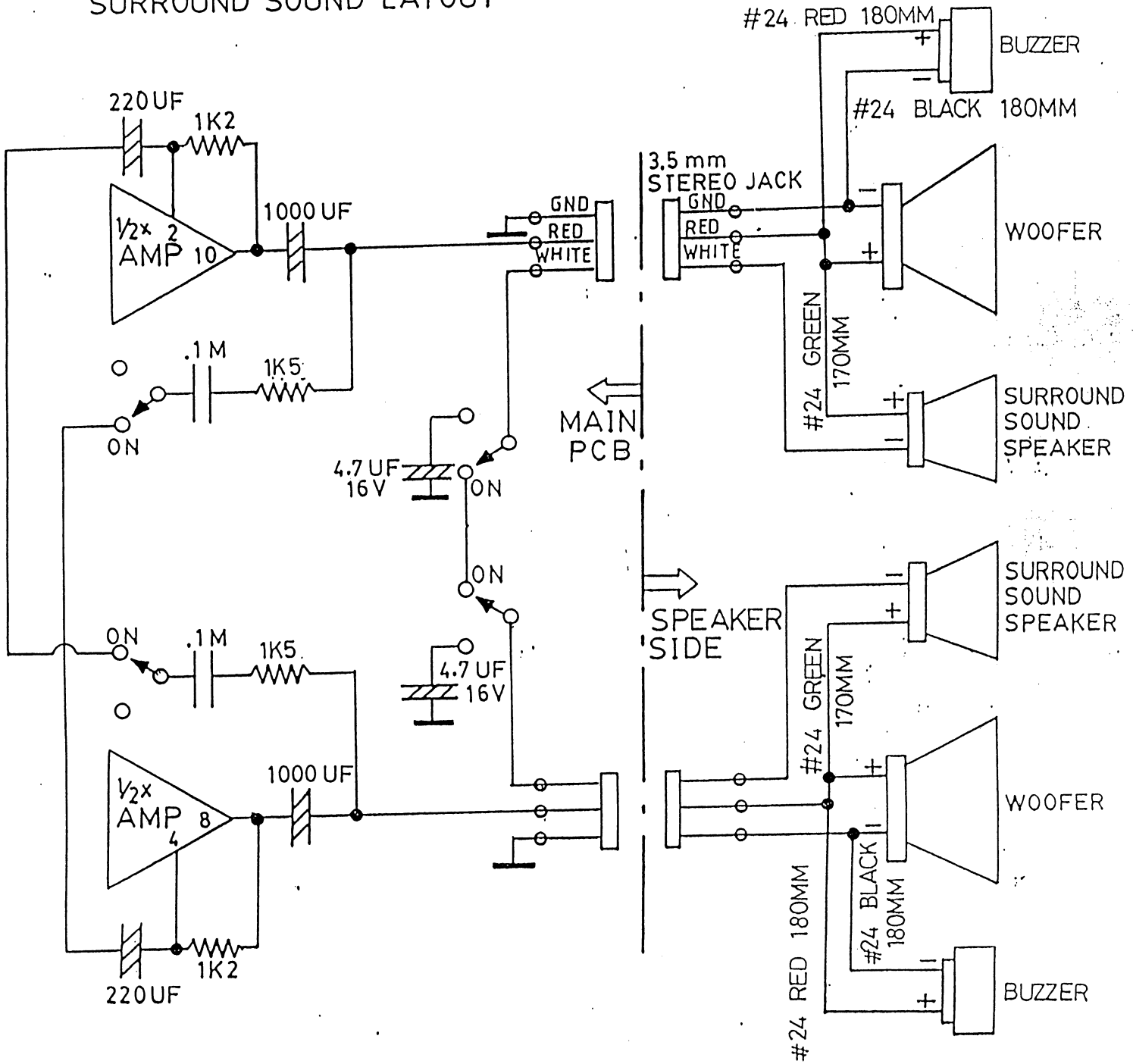
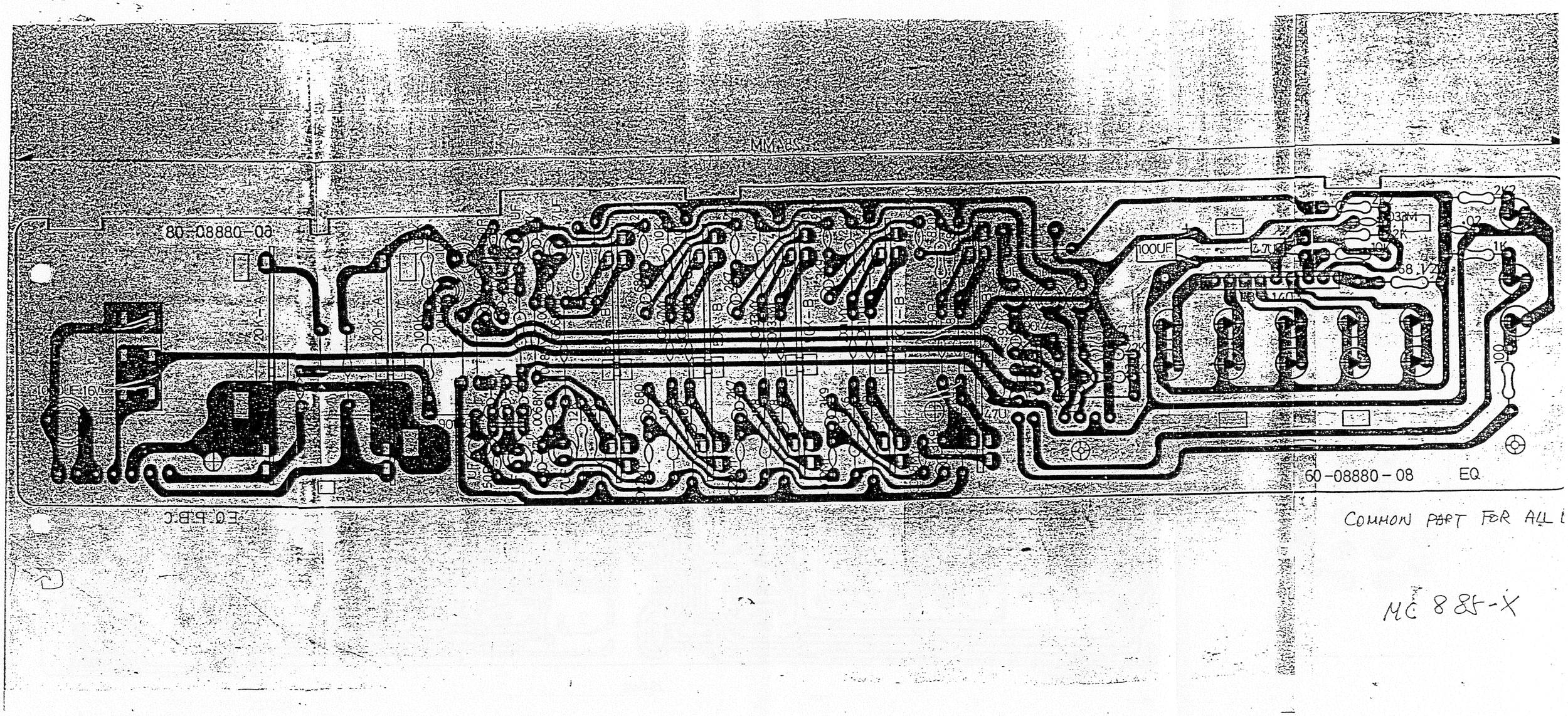
MM25

MC884-X

SURROUND SOUND LAYOUT





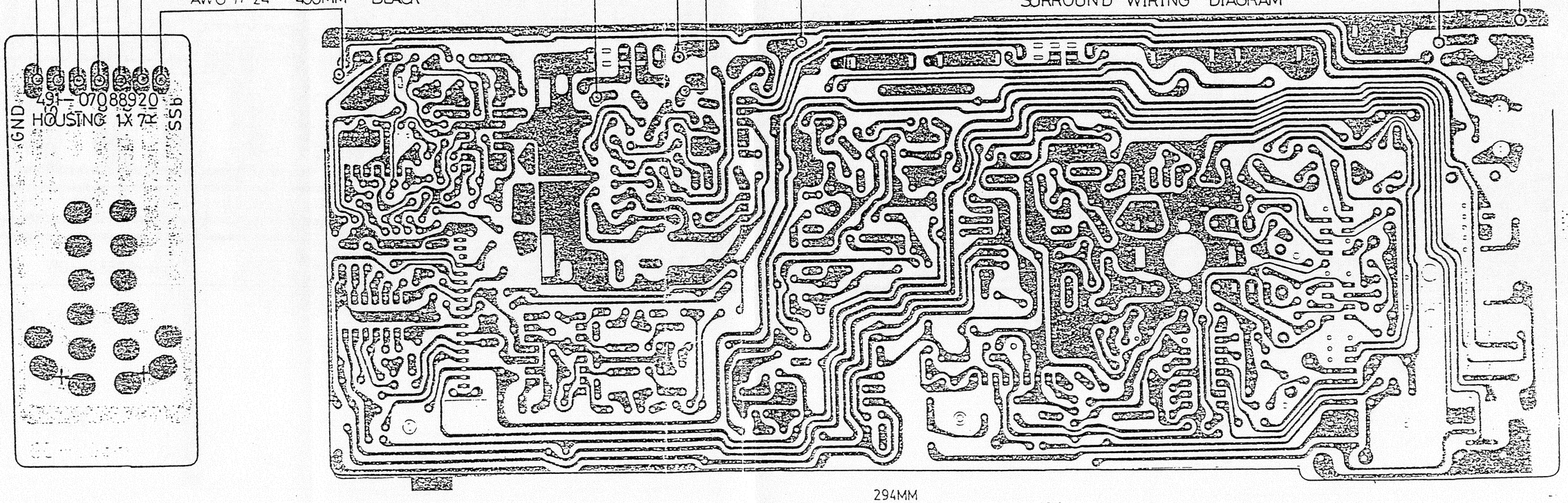
COMMON PART FOR ALL

MC 88-X

MC885-X

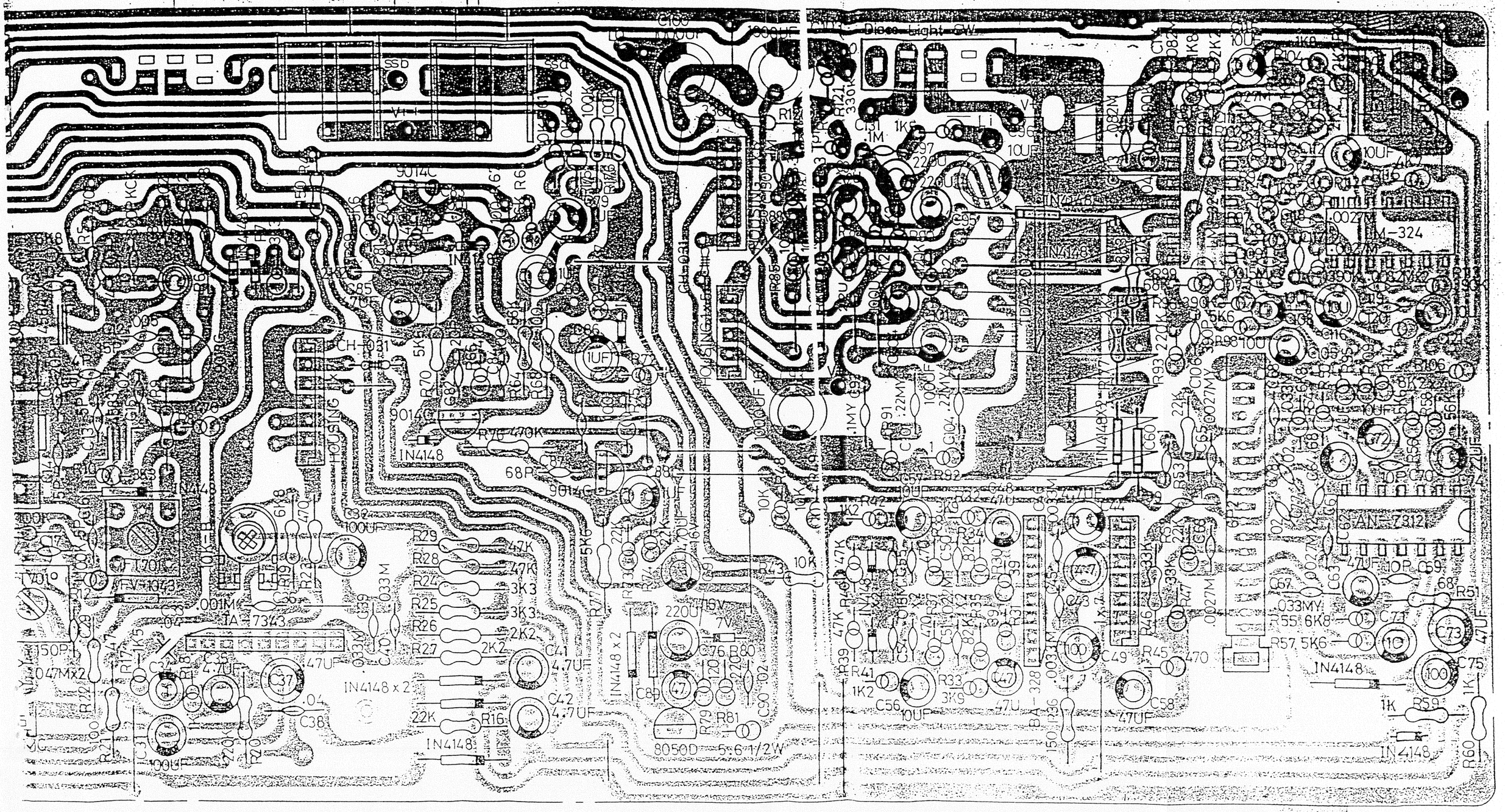
AWG #24 160MM RED
AWG #24 160MM ORANGE
AWG #24 360MM YELLOW
AWG #24 360MM GREEN
AWG #24 360MM BLUE
AWG #24 360MM VIOLET
AWG #24 400MM BLACK

SURROUND WIRING DIAGRAM



294MM

MODEL : [illegible]
AM-FM-SW-LW



MODEL: AM-FM-SW-LW

MC 881-X

MM4812

7.5